

TABLE 1

Conditions of Circumferential Surface of Cooling Roll
and Grooves Formed therein

	Average Width L_1 (μm)	Average Depth L_2 (μm)	Average Pitch L_3 (μm)	Angle θ	Projected Area of Portion of Grooves (%)	Surface Roughness R_a (μm)
Example 1	15.0	3.2	30.0	0°	50	0.80
Example 2	5.0	5.0	12.5	3°	40	1.12
Example 3	9.2	1.5	10.0	5°	92	0.50
Example 4	27.0	8.0	90.0	10°	30	2.10
Example 5	30.0	2.0	50.0	15°	60	0.55
Example 6	15.0	1.8	20.0	20°	75	0.60
Example 7	6.4	4.0	8.0	28°	80	0.95
Example 8	9.5	2.5	15.0	$\theta_1=15^\circ$ $\theta_2=15^\circ$	58	0.63
Example 9	20.0	1.5	30.0	$\theta_1=10^\circ$ $\theta_2=20^\circ$	63	0.45
Comp.Ex.	-	-	-	-	-	0.08

TABLE 2

Average Thickness of Melt Spun Ribbon
and Magnetic Properties thereof

(Examples 1 – 7)

	Sample No.	Average Thickness (μm)	H_{CJ} (kA/m)	Br (T)	$(BH)_{\text{max}}$ (kJ/m^3)
Example 1	1	19	555	1.06	160
	2	19	550	1.05	156
	3	18	545	1.06	158
	4	18	548	1.06	160
	5	19	552	1.05	157
Example 2	1	20	560	1.04	152
	2	19	555	1.05	155
	3	19	553	1.05	153
	4	20	561	1.05	154
	5	19	556	1.04	150
Example 3	1	22	570	1.02	150
	2	21	562	1.03	149
	3	20	558	1.02	149
	4	22	569	1.01	152
	5	21	560	1.02	151
Example 4	1	25	554	0.96	138
	2	19	538	0.98	142
	3	24	550	0.96	140
	4	20	542	0.97	143
	5	21	545	0.97	137
Example 5	1	20	562	1.04	155
	2	20	560	1.04	152
	3	21	564	1.03	153
	4	20	560	1.04	151
	5	21	565	1.03	150
Example 6	1	17	528	1.05	159
	2	18	535	1.05	158
	3	18	532	1.05	155
	4	17	529	1.06	157
	5	18	533	1.05	155
Example 7	1	21	559	1.03	156
	2	22	563	1.03	153
	3	20	557	1.04	154
	4	20	556	1.04	151
	5	20	558	1.04	152

TABLE 3

Average Thickness of Melt Spun Ribbon

and Magnetic Properties thereof

(Examples 8 and 9, Comp. Ex.)

	Sample No.	Average Thickness (μm)	H_{CJ} (kA/m)	Br (T)	$(BH)_{\text{max}}$ (kJ/m ³)
Example 8	1	19	548	1.05	149
	2	20	553	1.03	150
	3	21	545	1.04	152
	4	19	549	1.04	151
	5	21	555	1.02	154
Example 9	1	21	560	1.02	149
	2	22	562	1.01	148
	3	20	555	1.01	150
	4	19	557	1.03	148
	5	21	563	1.02	147
Comp.Ex.	1	30	413	0.72	59
	2	18	235	0.90	72
	3	20	370	0.81	75
	4	28	330	0.78	63
	5	17	210	0.65	55

TABLE 4

Mean Particle Size of Magnetic Powder
and Magnetic Properties of Bonded Magnet

	Mean Particle Size (nm)	H_{CJ} (kA/m)	Br (T)	$(BH)_{max}$ (kJ/m ³)
Example 1	28	550	0.88	115
Example 2	29	558	0.87	110
Example 3	35	565	0.85	104
Example 4	40	545	0.81	94
Example 5	33	562	0.86	107
Example 6	27	532	0.88	112
Example 7	32	559	0.87	108
Example 8	30	550	0.87	106
Example 9	34	560	0.85	103
Comp.Ex.	65	355	0.68	48